

skin, with the formation of vesicles containing blood. On this account L. warns against injections in the face.—*Deutsche mediz. Zeit.*

THE TREATMENT OF OPIUM ADDICTION (*St. Louis Courier of Medicine*, Dec., 1884).—In a very elaborate and positive article, Dr. J. B. Mattison returns to the treatment of the opium habit. He speaks strongly and positively against the sudden withdrawal of the drug, declaring such a method to be unnecessary, that it entails horrible suffering, is barbarous, inexcusable, mal-practice, etc. M.'s method is the one he has advocated before, namely, the gradual withdrawal of opium, combined with "preliminary sedation," by means of bromide of sodium, to diminish reflex irritation. His plan is to keep the system continually under the bromide influence from the beginning. The bromide must be given in full doses. The initial dose is 60 grains twice daily at twelve hours' intervals, increasing the amount 20 grains each day, *i. e.*, 70, 80, 90 grains per dose, and continuing it five to seven days, reaching a maximum dose of 100 to 120 grains twice in twenty-four hours. During this time of bromide medication, the usual opiate is gradually reduced, so that from the eighth to the tenth day it is entirely abandoned. A decrease of one quarter or one third the usual daily quantity is made at the outset, experience having shown that habitués are almost always using an amount in excess of their natural need, and this reduction occasions little or no discomfort. Subsequently the opiate withdrawal is more or less rapid according to increasing sedation, the object being to meet and overcome the rising nervous disturbance by the growing effect of the sedative; in other words, maximum sedation at the time of maximum irritation. Each case must be treated according to its individual peculiarities, as regards amount of bromide given and rate of decrease of opium, the guide being the effect produced. Elaborate details are given for the treatment of after-effects, etc. Coca, Indian hemp, hot baths, and electricity are recommended as adjuvants for restlessness and insomnia. He insists that Indian hemp must be given in full doses of 60 minims of the fluid extract. M. recommends the administration of opium by the mouth instead of subcutaneously. It is not necessary to put the patient under surveillance or restriction of any kind. M. speaks strongly against the method advocated by Levinstein, and gives a rose-colored account of the results obtained by his own measures.

ERGOT OF RYE—AN INVESTIGATION INTO ITS ACTIVE PRINCIPLES (*Practitioner*, Dec., 1884).—Dr. R. Kobert publishes the result of his investigations. Ergot contains ergotinic acid, sphacelinic acid and cornutin. 1. The ergotinic acid is the active principle of Bonjean's extract, of Wernich's dialysed ergotine, and of the sclerotinic acid of Dragendorff and Podwysotszki. It does not cause uterine contractions nor gangrene, but paralysis, commen-

cing in the spinal cord and ascending to the brain, dilatation of the blood-vessels and lowering of the blood pressure. It is decomposed in the intestinal canal. 2. Sphacelinic acid causes gangrene—its most prominent property. Microscopic examination of the gangrenous parts shows a hyaline exudation on the walls of the smaller arteries, which almost wholly occludes their lumens. In rabbits, guinea-pigs, and cats no gangrene occurs, for the vessels of these animals do not give out a hyaline mass, but their walls degenerate, so that there result numerous small effusions of blood in the most various organs. The blood pressure rises, owing to contraction of the vessels. On the uterus this acid acts by causing contractions, and as a fact genuine tetanus. 3. Cornutin is the only energetic alkaloid in ergot. The ergotenin of Tauret proved to be without physiological effect. Cornutin acts powerfully in doses of  $\frac{1}{32}$  part of a milligram. Frogs fall into a state of spastic rigidity lasting many days. The contractions of the uterus are not tonic but clonic. The blood pressure is raised and the vessels contracted.

In practice only preparations of ergot should be used which contain the two last principles, as ergotinic acid is useless.

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NITRITE OF AMYL AS AN ANTIDOTE IN STRYCHNIA-POISONING (*Boston Med. and Surg. Journ.*, Nov. 20, 1884).—Dr. Hobart A. Dare has repeated the experiments of Gray to determine the value of nitrite of amyl in strychnia-poisoning. Gray, who used only two rabbits, injected hypodermically ten drops of the nitrite and  $\frac{1}{2}$  grain of strychnia simultaneously, and obtained no decided symptoms, although  $\frac{1}{4}$  grain strychnia alone caused death. H. used six rabbits, and found that  $\frac{1}{80}$  grain strychnia caused death. Nitrite of amyl did not prevent a fatal issue, though it evidently prolonged life, and is capable of stopping a convulsion. He concludes as follows: 1st. Nitrite of amyl does prolong life in strychnia-poisoning, though its action is so fleeting compared to that of its adversary, that it can only be used to tide over the patient until more persistent remedies or antidotes, such as bromide and chloral, can be administered. 2d. That it cannot be used by inhalation with any chance of security from a fatal termination, owing to the facts regarding expiration before stated (spasm of respiratory muscles in expiration). 3d. The longer the nitrite be given after the strychnia, the less good will it do, *provided* the strychnia has already shown itself by convulsions or otherwise. This is because death is more apt to come before the nitrite can fully act. 4th. The nitrite has to be given so that its full physiological effect is constantly present. 5th. An injection of nitrite should be first given, and the patient be kept moderately under its influence till other remedies are obtainable.

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